

Riding

by Capt. Kevin Mulligan, USMC

It was a cold December day, and our squadron was winding up a 10-day Supporting Arms Training Exercise (SATEX) at Bogue Marine Corps Auxiliary Landing Field, N.C. We had endured the winter chill in the meat-locker-cold K-Spans, and we were ready to go anywhere warm.

When the operations officer threw the cross-country idea on the table, the single aviators were all over it. Leaving Bogue Field early on a Friday afternoon, our plan was to complete one of the final SATEX events and then fly into MCAS Cherry Point for the night. In the morning, we would continue to balmy Key West, Fla. Our Hornets were tired from the heavy operational tempo of the last 10 days; however, we had faith they had enough in them for the weekend plan.

After working off of a 4,000-foot metal-matted strip at Bogue Field, an 8,000-foot runway at MCAS Cherry Point was a welcome sight. Every landing for the past 10 days had been a field arrestment. Because of this, we hadn't had to use the anti-skid system. The squadron also had used hook points at a rate that would raise eyebrows at most FA-18D squadrons. The runways at MCAS Cherry Point, fortunately, were different.

The clear, cold, dry day was perfect for flying, and I had taken off from Bogue Field with minimal ground roll. I came into the overhead at MCAS Cherry Point as Dash 2, in a flight of two. The first phase of the weekend went as briefed, but that reality changed rapidly.

Everything looked normal during the landing checks, and the slight right-to-left cross-

wind was of little concern. Lead landed easily, as my WSO and I rolled into the groove. Though I still flew the ball down to the in-close position, it was nice to be able to add the extra power, flare, and settle the jet onto the runway. As we continued our landing rollout, lead offset to the right side of the runway, allowing me the left side in case I needed to go around.

The jet was decelerating nicely as it rolled up the slightly uphill grade. At 100 knots, I checked the brakes. I was surprised to have the brake pedals go all the way to the deck. At 95 knots, I again checked the brakes, with the same result. The throttles were at idle, the speed brake was extended, and I had programmed the stick full aft. Though the jet was continuing to decelerate, I had no way to slow it with normal braking. The active runway at MCAS Cherry Point did not have any long-field-arresting gear rigged. With the line boards steadily clicking down, I was rapidly running out of real estate. With the bold face for a brake failure racing through my brain, I decided to use the emergency brakes to keep the aircraft on the runway.

Checking my hydraulic and brake pressure gauges, I saw the systems were operating normally. Pulling my feet clear of the rudder pedals, I pulled the emergency-brake handle to the detent, said a quick prayer, and tried one smooth application of the brakes. Somewhere in the application, the left main mount locked, bulls-eyed, and blew out. Steering was never an issue, and the airspeed continued to decelerate to below line speed. Rolling straight ahead, we cleared the runway



onto the mid-field ramp. I brought the jet to a stop and awaited the field's ground support.

Although I had seen brake failures in the simulator, I never had experienced one in the jet. In reality, the indications were identical to those in the simulator, and that practice aided my analysis of the situation. But I still felt that my reaction to the brake failure was delayed. I had never had the brakes do anything but work as advertised.

As I was processing the information, the jet had been decelerating and rolling toward the end of the runway. Treating the brake failure like an aborted takeoff roll, I had not wanted to change my course of action and aggravate the situation. Having committed to keeping the jet on deck, I had performed the boldface steps for a brake failure. If the emergency brakes hadn't worked, I would not

have had enough runway remaining to add power and get off the deck.

The only damage to the aircraft was the blown tire. The maintainers found a faulty valve, which had caused the anti-skid system to fail. Since we had been working out of Bogue Field, and had been taking arrested landings every time, the anti-skid system had not been used for days. Therefore, we were not sure how long the problem had existed.

Since that experience, I have begun to test the brakes at a higher airspeed (closer to 130 knots instead of 100 knots). Testing the brakes early does two things for the aircrew. First, it tells the pilot the status of his brakes sooner, giving him time to decide if he should keep the jet on deck or take it around. Second, it gives the engine more time to spool up, if required, so you can take off and go around. 🦅

Capt. Mulligan flies with VMFA-332.